

Appendix 12.6

RSPB Ornithology Data

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1 Introduction

1.1 Background

- 1.1.1 This appendix sets out data provided by the Royal Society for the Protection of Birds (RSPB) Scotland (hereon referred to as RSPB) for Insh Marshes National Nature Reserve (NNR). It also includes tetrad (2 x 2 km squares) data provided by the British Trust for Ornithology (BTO).
- 1.1.2 This data has been used to inform the Environmental Impact Assessment (EIA) for Project 9 Crubenmore to Kincaig of the A9 Dualling Programme. Data has been provided for breeding and overwintering seasons, reflecting the presence of interest features year round.

2 Data

2.1 RSPB Breeding Data

- 2.1.1 Breeding bird census data is collected annually within Insh Marshes NNR, and is based on methodology developed by O’Brien and Smith (1992)¹ for undertaking census of lowland breeding waders. The presence of breeding birds outwith Insh Marshes is reported within **Appendix 12.4, Volume 2**.
- 2.1.2 **Table 12.6.1** and **Table 12.6.2** set out the breeding bird populations reported during the 2015, 2016 and 2017 breeding bird seasons within the Insh Marshes RSPB survey compartments. RSPB breeding survey compartments are illustrated on **Drawing 12.40, Volume 3**. Where no data has been provided for some compartments this is noted by a dash (-).
- 2.1.3 **Table 12.6.1** sets out breeding species which are interest features of the River Spey – Insh Marshes Special Protection Area (SPA) or the River Spey – Insh Marshes Site of Special Scientific Interest (SSSI) (components of the SSSI breeding bird assemblage)
- 2.1.4 **Table 12.6.2** sets out the results of breeding bird species not associated with statutory designated sites. Oystercatcher and Lapwing form part of the Strathspey breeding wader assemblage.

Table 12.6.1: River Spey – Insh Marshes SPA/ SSSI breeding species distribution within Insh Marshes

Insh Marshes RSPB Survey Compartments	Species																	
	Curlew			Redshank			Snipe			Goldeneye			Shoveler			Wigeon		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Ruthven	3	4	2	11	11	6	14	10	3	0	1	1	0	0	0	2	0	1
Pitmain	2	-	-	2	-	-	4	-	-	0	-	-	0	-	0	2	-	-
Gordonhall	11	9	7	22	23	7	11	27	20	0	0	0	0	0	0	0	0	1
Invertromie	9	8	9	10	8	6	22	10	13	0	0	2	0	0	0	2	1	1
Cemetery marsh	5	5	1	7	5	3	9	11	6	0	0	0	0	0	0	3	4	1
Balavil (North)	4	9	16	18	12	11	20	21	21	0	0	0	0	0	0	11	6	8
Balavil (South)	2	4	4	10	9	9	12	22	20	0	0	0	0	0	0	2	3	5
Lynchat	4	5	6	10	1	1	19	4	11	0	4	0	0	0	0	4	1	1
Dunachton	3	-	-	1	-	-	9	-	-	0	-	-	0	-	-	1	-	-
Eilean Vean	0	0	0	0	0	0	4	4	3	3	2	0	0	0	0	1	1	0
Loch Insh	-	0	0	-	0	0	-	0	0	-	2	1	-	0	0	-	0	0
Insh	-	-	23	-	-	-	-	-	-	-	-	3	-	-	1	-	-	3
Coull	-	-	11	-	-	-	-	-	-	-	-	1	-	-	0	-	-	3

¹ O'Brien, M. & Smith, K.W. 1992. Changes in the status of waders breeding on wet lowland grasslands in England and Wales between 1982 and 1989. Bird Study 39: 165-176.

Table 12.6.2: Additional breeding bird species distribution within Insh Marshes

Species	RSPB Insh Marshes Survey Compartment																																
	Ruthven			Pitmain			Gordonhall			Invertromie			Cemetery Marsh			Balavil (North)			Balavil (South)			Lynchat			Dunachton			Eilean Veain			Loch Insh		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Lapwing	19	16	17	2	-	-	21	12	15	7	5	7	-	4	1	4	6	3	6	4	9	4	0	0	1	-	-	0	0	0	-	0	
Oystercatcher	12	17	7	6	-	-	2	2	3	5	1	16	-	2	1	2	7	6	2	2	4	2	1	1	1	-	-	0	0	0	-	0	1
Common sandpiper	3	2	2	0	-	-	0	0	0	5	1	3	-	0	0	1	4	3	1	3	3	1	3	1	0	-	-	0	0	0	-	2	0
Mute swan	0	0	0	0	-	-	0	0	0	0		0	-	0	0	1	1	0	0	0	0	0	0	0	-	-	-	1	0	0	-	0	0
Greylag goose	4	2	1	3	-	-	14	7	4	9	2	7	-	6	3	20	13	10	4	2	20	3	5	0	4	-	-	0	0	0	-	0	0
Teal	4	2	1	0	-	-	3	5	1	7	6	7	-	11	3	2	10	11	10	15	10	4	2	1	4	-	-	3	0	0	-	0	0
Mallard	14	22	9	6	-	-	46	46	9	37	27	20	-	12	4	13	17	11	3	12	7	16	22	5	12	-	-	1	5	1	-	4	1
Tufted duck	0	0	0	0	-	-	0	0	1	0	0	0	-	0	0	11	5	4	0	0	0	0	0	0	0	-	-	0	1	0	-	0	4
Goosander	1	2	0	0	-	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	1	0	0	-	-	1	0	0	-	0	0
Black headed gull	0	0	0	0	-	-	0	-	0	0	0	0	-	7	4	0	17	19	0	0	0	0	0	0	0	-	-	0	0	0	-	0	0
Common gull	0	0	0	0	-	-	1	0	0	1	0	0	-	0	0	0		0	0	0	0	0	0	0	0	-	-	0		0	-		0
Water rail	0	1	0	0	-	-	2	3	2	2	2	3	-	1	2	8	6	4	3	3	2	3	3	1	0	-	-	0	0	0	-	0	0
Moorhen	0	0	0	0	-	-	1	0	0	0	0	0	-	0	0	2	0	0	2	0	0	0	1	0	1	-	-	0	0	0	-	0	0
Coot	0	0	0	0	-	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	-	0	0
Sedge warbler	2	1	2	4	-	-	7	5	10	5	6	11	-	4	3	14	14	15	4	9	11	20	7		18	-	-	3	0	1	-	0	0
Grasshopper warbler	0	0		1	-	-	0	1	0	1	0	1	-	3	2	4	8	6	4	2	5	2	2	1	0	-	-	0	0	0	-	0	0
Reed bunting	1	1	1	2	-	-	11	10	7	4	8	11	-	3	4	9	10	12	3	7	8	5	6	6	9	-	-	1	0	1	-	0	0
Skylark	5	3	1	0	-	-	2	4	4	0	1	3	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	-	0	0
Dipper	1	1	0	0	-	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	1	0	0	0	-	-	0	0	0	-	0	0

2.2 BTO Breeding Records

2.2.1 An overview of notable breeding species within BTO tetrads (2 x 2 km recording units) which overlap with, or are directly adjacent to, the study area is summarised in **Table 12.6.3**. Notable species identified through the review of the tetrads include:

- Species included on Annex 1 of the EC Birds Directive
- Bird species included on Schedule 1 of the Wildlife and Countryside Act
- Bird species included on the Scottish Biodiversity List (SBL)
- Bird species named as priority species within the Cairngorms Nature Action Plan (CNAP)
- Bird species included on the Red or Amber List of the Birds of Conservation Concern (BoCC)

Table 12.6.3: Overview of notable breeding species present within relevant tetrads (BTO Data)

Species	Latin name	Annexe 1 EC Birds Directive	Schedule 1 Wildlife and Countryside Act	SBL	CNAP	BoCC Red/ Amber List
Crossbill species	<i>Loxia sp.</i>		✓			
Black-headed gull	<i>Chroicocephalus ridibundus</i>					Amber
Bullfinch	<i>Pyrrhula pyrrhula</i>			✓		Amber
Common sandpiper	<i>Actitis hypoleucos</i>					Amber
Cuckoo	<i>Cuculus baunuls</i>			✓		Red
Dipper	<i>Cinclus cinclus</i>					Amber
Dunnock	<i>Prunella modularis</i>			✓		Red
Greylag goose	<i>Anser anser</i>					Amber
Grey Wagtail	<i>Motacilla cinerea</i>					Red
House Martin	<i>Delichon urbica</i>					Amber
House sparrow	<i>Passer domesticus</i>			✓		Red
Kestrel	<i>Falco tininculus</i>			✓		Amber
Lapwing	<i>Vanellus vanellus</i>			✓	✓	Red
Lesser redpoll	<i>Carduelis cabaret</i>			✓		Red
Linnett	<i>Carduelis cannabina</i>			✓		Red
Mallard	<i>Anas Platrhynchos</i>					Amber
Meadow pipit	<i>Anthus pratensis</i>					Amber
Mistle thrush	<i>Turdus viscivorous</i>					Red
Mute swan	<i>Cygnus olor</i>					Amber
Oystercatcher	<i>Haemotopus australagus</i>					Amber
Pied flycatcher	<i>Ficedula hypoleuca</i>					Red
Red grouse	<i>Lagopus lagopus s</i>			✓		Amber
Redstart	<i>Phoenicurus phoenicurus</i>					Amber

Species	Latin name	Annexe 1 EC Birds Directive	Schedule 1 Wildlife and Countryside Act	SBL	CNAP	BoCC Red/ Amber List
Reed bunting	<i>Emberiza schoeniclus</i>			✓		Amber
Ringed plover	<i>Charadrius hiaticula</i>					Red
Ring Ouzel	<i>Turdus torquatus</i>			✓		Red
Skylark	<i>Alauda arvensis</i>			✓		Red
Song thrush	<i>Turdus philomelos</i>			✓		Red
Spotted flycatcher	<i>Muscicapa striata</i>			✓		Red
Starling	<i>Sturnus vulgaris</i>			✓		Red
Swift	<i>Apus apus</i>			✓		Amber
Tawny owl	<i>Strix aluco</i>					Amber
Teal	<i>Anas crecca</i>					Amber
Tree Pippit	<i>Anthus trivialis</i>			✓		Red
Whinchat	<i>Saxicola rubetra</i>					Red
Willow warbler	<i>Phylloscopus trochilus</i>					Amber
Wood warbler	<i>Phylloscopus sibilatrix</i>			✓		Red
Woodcock	<i>Scolopax rusticola</i>			✓		Red

2.3 RSPB Non-breeding Data

2.3.1 RSPB coordinates monthly wetland birds survey counts during the winter period (March to October) in accordance with BTO Wetland Birds Survey (WeBS). WeBS form part of nationally co-ordinated wetland bird counts.

2.3.2 **Table 12.6.4** sets out peak counts for each bird species recorded within the Insh Marshes RSPB survey compartments across three WeBS winter survey periods.

Table 12.6.4: BTO WeBS data peak counts for each species within each reserve compartment

Insh Marshes RSPB Survey Compartment	2014-2015	2015-2016	2016-2017
Barnacle Goose			
Dell of Killiehuntly	0	0	3
Black-headed Gull			
Balavil Fen	10	0	0
Dell of Killiehuntly	30	19	8
Dunachton	2	0	0
Gordonhall	0	11	0
Insh Fen	0	6	0
Invertomie Marsh	0	0	3
Loch Insh whole	1	6	5
Ruthven	1	0	96
Common Gull			
Dell of Killiehuntly	14	2	0
Gordonhall	0	1	0
Invertomie Marsh	1	3	0
Lynchat	1	0	0
Ruthven	0	2	0
Canada Goose			
Dell of Killiehuntly	0	0	7
Dunacton	0	0	0
Gordonhall	0	4	4
Invertomie Marsh	0	21	5
Cormorant			
Balavil Fen	6	6	6
Coull Fen	0	1	0
Dell of Killiehuntly	1	1	0
Gordonhall	0	1	0
Insh Fen	5	10	0
Invertomie Marsh	0	4	0
Loch Insh whole	2	4	6
Lynchat	0	1	0
Curlew			
Balavil Fen	1	6	6
Coull Fen	0	0	6
Dell of Killiehuntly	5	3	17
Dunacton	0	1	0
Gordonhall	10	13	6
Insh Fen	4	7	0
Invertomie Marsh	2	11	2
Lynchat	1	0	4
Golden Plover			
Dell of Killiehuntly	0	16	0
Goldeneye			
Balavil Fen	25	2	6
Coull Fen	7	17	18
Dell of Killiehuntly	23	23	19
Gordonhall	6	0	3
Insh Fen	10	29	6

Insh Marshes RSPB Survey Compartment	2014-2015	2015-2016	2016-2017
Invertomie Marsh	7	3	6
Loch Insh whole	11	46	20
Ruthven	1	1	1
Goosander			
Coull Fen	0	0	0
Dell of Killiehuntly	3	2	1
Dunacton	7	0	0
Gordonhall	1	0	2
Insh Fen	3	2	1
Invertomie Marsh	4	1	2
Goose (white fronted)			
Dell of Killiehuntly	0	1	0
Great Black-backed Gull			
Insh Fen	0	2	0
Loch Insh whole	1	3	2
Lynchat	1	0	0
Grey Heron			
Balavil Fen	0	1	1
Coull Fen	1	0	3
Dell of Killiehuntly	2	0	1
Dunacton	0	0	1
Gordonhall	1	2	3
Insh Fen	1	4	0
Invertomie Marsh	2	2	1
Loch Insh whole	2	3	0
Lynchat	2	2	2
Ruthven	1	0	0
Greylag Goose			
Balavil Fen	0	8	4
Coull Fen	26	48	141
Dell of Killiehuntly	410	191	143
Dunacton	5	0	130
Gordonhall	22	195	14
Insh Fen	195	69	84
Invertomie Marsh	59	127	3
Loch Insh whole	62	499	152
Lynchat	9	21	0
Ruthven	10	0	98
Herring gull			
Dell of Killiehuntly	4	0	3
Loch Insh whole	1	3	1
Lynchat	2	0	0
Kingfisher			
Insh Fen	0	1	0
Lapwing			
Balavil Fen	0	4	1
Dell of Killiehuntly	32	92	15
Gordonhall	149	53	176
Insh Fen	0	15	0
Invertomie Marsh	6	7	2
Loch Insh whole	3	2	0
Lynchat	3	0	0
Ruthven	13	1	8
Little Grebe			
Coull Fen	0	0	1
Dell of Killiehuntly	0	4	1
Gordonhall	1	2	0
Insh Fen	0	1	2
Invertomie Marsh	0	3	1
Ruthven	1	0	1

Insh Marshes RSPB Survey Compartment	2014-2015	2015-2016	2016-2017
Long-tailed Duck			
Loch Insh whole	0	0	1
Mallard			
Balavil Fen	99	66	25
Coull Fen	60	88	126
Dell of Killiehuntly	157	38	101
Dunacton	0	24	0
Gordonhall	121	130	35
Insh Fen	172	184	73
Invertomie Marsh	179	22	103
Loch Insh whole	69	106	59
Lynchat	12	20	7
Ruthven	58	71	4
Moorhen			
Insh Fen	0	1	1
Ruthven	0	1	0
Mute Swan			
Balavil Fen	1	0	2
Coull Fen	4	2	6
Dell of Killiehuntly	1	0	2
Insh Fen	5	2	4
Invertomie Marsh	2	0	0
Loch Insh whole	3	5	2
Oystercatcher			
Balavil Fen	0	0	16
Coull Fen	0	0	3
Dell of Killiehuntly	14	10	1
Gordonhall	40	34	61
Insh Fen	3	3	0
Invertomie Marsh	9	6	2
Loch Insh whole	4	2	30
Lynchat	2	0	0
Ruthven	6	0	3
Pink-footed Goose			
Balavil Fen	0	0	1
Dell of Killiehuntly	284	565	573
Gordonhall	1	0	0
Invertomie Marsh	0	19	0
Loch Insh whole	0	81	0
Pochard			
Insh Fen	0	1	0
Loch Insh whole	4	1	0
Redshank			
Balavil Fen	0	0	3
Coull Fen	0	0	1
Gordonhall	5	4	2
Lynchat	0	2	0
Scaup			
Loch Insh whole	0	0	1
Snipe			
Dell of Killiehuntly	1	2	0
Insh Fen	1	4	2
Ruthven	0	0	1
Teal			
Balavil Fen	213	40	27
Coull Fen	15	46	40
Dell of Killiehuntly	69	39	49
Gordonhall	90	42	88
Insh Fen	51	53	6
Invertomie Marsh	77	108	44

Insh Marshes RSPB Survey Compartment	2014-2015	2015-2016	2016-2017
Loch Insh whole	16	36	31
Lynchat	4	9	0
Ruthven	66	164	2
Tufted Duck			
Balavil Fen	3	0	6
Coull Fen	0	2	5
Dell of Killiehuntly	5	8	4
Insh Fen	3	7	3
Loch Insh whole	39	43	29
White-Fronted Goose			
Dell of Killiehuntly	0	6	0
Insh Fen	0	5	0
Whooper Swan			
Balavil Fen	25	26	24
Coull Fen	40	26	31
Dell of Killiehuntly	32	12	0
Dunacton	38	13	24
Gordonhall	56	32	10
Insh Fen	17	28	5
Invertomie Marsh	21	33	9
Loch Insh whole	28	59	12
Lynchat	29	7	37
Ruthven	4	0	6
Wigeon			
Balavil Fen	17	55	24
Coull Fen	0	94	76
Dell of Killiehuntly	225	47	145
Dunacton	7	0	0
Gordonhall	84	100	97
Insh Fen	102	40	25
Invertomie Marsh	270	310	144
Loch Insh whole	160	152	87
Lynchat	0	43	10
Ruthven	13	43	0

2.4 BTO Non-breeding Data

2.4.1 An overview of notable non-breeding species within BTO tetrads (2 x 2 km recording units) which overlap with, or are directly adjacent to, the study area is summarised in **Table 12.6.5**.

Table 12.6.5: Overview of notable non-breeding species present within relevant tetrads (BTO Data)

Species	Latin name	Annexe 1 EC Birds Directive	Schedule 1 Wildlife and Countryside Act	SBL	CNAP	BoCC Red/ Amber List
Black grouse	<i>Tetrao tetrix</i>	✓		✓	✓	Red
Golden plover	<i>Pluvialis apricaria</i>	✓		✓		-
Kingfisher	<i>Alcedo atthis</i>	✓	✓	✓		Amber
Merlin	<i>Falco columbarius</i>	✓	✓	✓		Amber
Peregrine	<i>Falco peregrinus</i>	✓	✓	✓		-
Crossbill species	<i>Loxia</i> sp.		✓	✓		Amber/ Green
Redwing	<i>Turdus iliacus</i>		✓	✓		Red
Black-headed gull	<i>Chroicocephalus ridibundus</i>			✓		Amber
Bullfinch	<i>Pyrrhula pyrrhula</i>			✓		Amber
Common gull	<i>Larus canus</i>					Amber
Curlew	<i>Numenius arquata</i>			✓		Red
Dipper	<i>Cinclus cinclus</i>					Amber
Dunnock	<i>Prunella modularis</i>			✓		Amber
Fieldfare	<i>Turdus pilaris</i>		✓			Red
Goldeneye	<i>Bucephala clangula</i>					Amber
Great black-backed gull	<i>Larus marinus</i>					Amber
Grey wagtail	<i>Motacilla cinerea</i>					Red
Greylag goose	<i>Anser anser</i>					Amber
Herring gull	<i>Larus argentatus</i>			✓		Red
House sparrow	<i>Passer domesticus</i>			✓		Red
Kestrel	<i>Falco tinnunculus</i>			✓		Amber
Lapwing	<i>Vanellus vanellus</i>			✓		Red
Lesser black-backed gull	<i>Larus. fuscus</i>					Amber
Lesser redpoll	<i>Carduelis cabaret</i>			✓		Red
Mallard	<i>Anas platyrhynchos</i>					Amber
Meadow pipit	<i>Anthus pratensis</i>					Amber
Mistle thrush	<i>Turdus viscivorus</i>					Red
Mute swan	<i>Cygnus olor</i>					Amber
Oystercatcher	<i>Haematopus australagus</i>					Amber
Pink-footed goose	<i>Anser brachyrhynchus</i>					Amber

Species	Latin name	Annexe 1 EC Birds Directive	Schedule 1 Wildlife and Countryside Act	SBL	CNAP	BoCC Red/ Amber List
Pochard	<i>Aythya ferina</i>					-
Red grouse	<i>Lagopus lagopus scotticus</i>			✓		Amber
Reed bunting	<i>Emberiza schoeniclus</i>			✓		Amber
Skylark	<i>Alauda arvensis</i>			✓		Red
Snipe	<i>Gallinago gallinago</i>					Amber
Song thrush	<i>Turdus philomelos</i>			✓		Red
Starling	<i>Sturnus vulgaris</i>			✓		Red
Tawny owl	<i>Strix aluco</i>					Amber
Teal	<i>Anas crecca</i>					Amber
Twite	<i>Carduelis flavirostris</i>			✓		Red
Wigeon	<i>Anas penelope</i>					Amber
Woodcock	<i>Scolopax rusticola</i>			✓		Red
Yellowhammer	<i>Emberiza citrinella</i>			✓		Red

